## DESCRIPTION OF A NEW COSMOPTERYGID LEAF MINER (LEPIDOPTERA) ON HELIANTHUS.

By AUGUST BUSCK, U. S. Bureau of Entomology.

#### TELADOMA, new genus.

#### Type: T. helianthi Busck.

Labial palpi long, porrected; second joint slightly curved, somewhat thickened with smooth scales; terminal joint shorter than second, thickened with scales at base, acute. Maxillary palpi rudimentary. Tongue spiraled. Head and face smooth, face retreating. Antennae little more than half the wing length, simple, slightly serrate in male, basal joint with strong pecten. Thorax smooth. Forewing smooth, elongate ovate, apex pointed; 10 veins, 2 and 3 obsolete; 4 and 5 approximate from end of cell; 6 separate; 7 and 8 stalked to costa; 11 from middle of cell; 9, 10, and 11 equidistant; 1*b* furcate at base; 1*c* present on basal half, outer half obsolete. Hind wing with costa slightly and evenly bent, apex pointed; 8 veins, all separate; 2, 3, and 4 nearly parallel; 5 bent toward 4 at base, but well separated; 6 and 7 parallel, enclosing apex (Plate 2, Fig. 5). Middle tibiae thickened with rough scales above; posterior tibiae with long rough hair tufts above and below.

Male genitalia (Plate 2, Fig. 1) asymmetrical; uncus absent; gnathos with its two uneven branches united at top into a spear-like point and enclosing the alimentary canal at their base; tegumen with lateral wings, the left much larger than the right; harpes ventrally placed, anellus triangular, with strong free arm supporting the aedoeagus, which is small, sharply pointed at apex, and with penis exit lateral, below the apex. Eighth abdominal segment (Plate 2, Fig. 4) with strong, slightly asymmetrical chitinizations dorsally and ventrally.

Female genitalia (Plate 2, Figs. 2 and 3) with the two lobes of the ovipositor folded inward to form a short tube; ostium protruding outside the abdomen as an asymmetrical tube; ductus long; bursa oval, thin-skinned, without stigma.

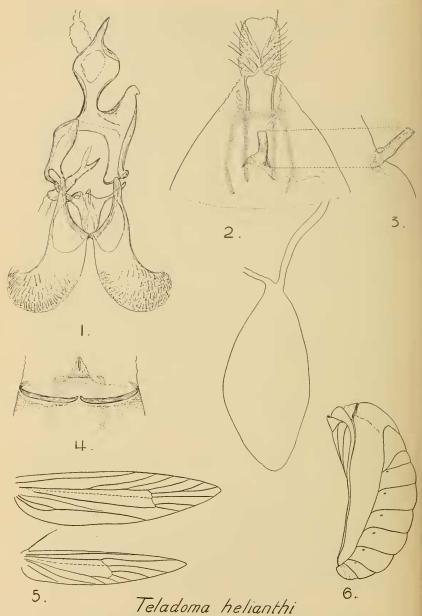
Pupa (Plate 2, Fig. 6) obtect, wingcovers reaching to middle of last abdominal segment and firmly soldered; smooth.

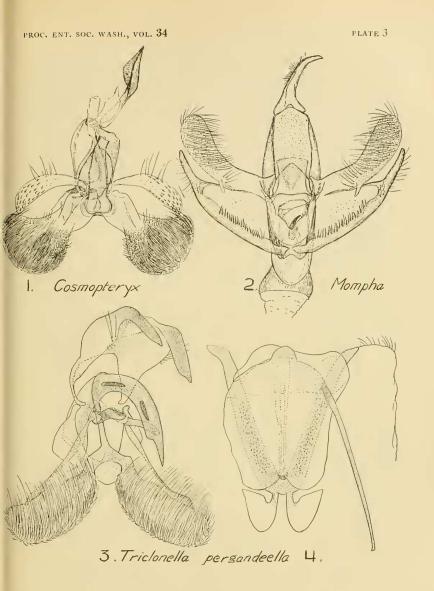
The genus belongs to the family *Cosmoplerygidae* as distinguished from the *Momphidae* (Lavernidae). The two families have been confused and united under the former name by European and American authors, the writer included, but they have no close relationship and must be retained as separate families. This will be the subject of a forthcoming paper. The *Momphidae* have symmetrical male genitalia (Plate 3, Fig. 2) and the ostium of the female not protruding beyond the body wall.

Some genera, hitherto placed in the family Oecophoridae, are found to belong to the Cosmopterygidae (Triclonella Busck (Plate 3, Fig. 3) and others).

#### Teladoma helianthi, new species.

Labial palpi dark brown with each scale strongly tipped with white. Head and thorax dark brown with white-tipped scales. Fore wing dark brown dusted with yellowish white, each scale white-tipped, producing a salt and pepper effect;





in some specimens the white constitutes the major color and the wing appears yellowish white with brown mottling; the obscure, ill-defined, blackish brown first and second discal spots are most noticeable in the light colored specimens and are nearly or quite obsolete in the darker specimens; cilia dark fuscous. Hind wing dark fuscous with lighter fuscous cilia. Abdomen and legs dark brown with each scale white-tipped.

Alar expanse. 9 12 mm.

## Habitat.—East St. Louis, Illinois. Type.—U. S. National Museum No. 43657. Foodplants.—Helianthus and Xanthium.

This interesting species was reared in large series from leaf mines in the above plants by Mr. A. F. Satterthwait of the U. S. Bureau of Entomology, who will eventually publish on the biology and economic aspects of the species.

#### EXPLANATION OF PLATES.

#### Plate 2.

#### Teladoma helianthi Busck.

- Fig. 1. Male genitalia.
- Fig. 2. Female genitalia.
- Fig. 3. Protruding ostium of female.
- Fig. 4. Eighth abdominal segment of male.
- Fig. 5. Wing venation.
- Fig. 6. Pupa.

### Plate 3.

- Fig 1. Cosmopteryx zieglerella Hübner. Genotype. Male genitalia.
- Fig. 2. Mompha conturbatella Hübner. Genotype. Male genitalia.
- Fig. 3. Triclonella pergandeella Busck. Genotype. Male genitalia.
- Fig. 4. Triclonella pergandeella Busck. Fighth abdominal segment of male.

(The drawings were made by Mrs. Eleanor A. Carlin under the author's supervision from slides prepared by him.)

# A NEW SPECIES INFESTING ANNONA (LEPIDOPTERA : OLETHREUTIDAE).

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**Talponia batesi**, new species. (Plate 4, Figs. 1, 2.)

A moderately sized species with basal half of fore wing olivaceous ocherous; outer half paler and marked with leaden metallic streaks and mottlings; costa strongly and abruptly arched just beyond middle; termen concave just below apex; near termen from tornus to apex an irregular row of black dots.

Antenna short, scarcely one-third length of costa; finely pubescent beneath,